09/716,054
LVCook 4/7/05.
updated Search.

d his

(FILE 'HOME' ENTERED AT 10:43:35 ON 07 APR 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 10:43:50 ON 07 APR 2005

L1	280259	S (PROTEIN BINDING)
L2	28145	S L1 AND (IN VIVO)
L3	917	S L2 AND REVIEW?
L4	317	S L3 AND INHIBIT?
L5	148	S L4 AND CLINICAL?
L6	127	DUPLICATE REMOVE L5 (21 DUPLICATES REMOVED)
L7	0	S L6 AND FKBP?
L8	573	S L1 AND FKBP?
L9	66	S L8 AND L2
L10	3	S L9 AND REVIEW?
L11	1	DUPLICATE REMOVE L10 (2 DUPLICATES REMOVED)

=>

```
d his

     (FILE 'HOME' ENTERED AT 10:43:35 ON 07 APR 2005)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
     10:43:50 ON 07 APR 2005
L1        280259 S (PROTEIN BINDING)
L2         28145 S L1 AND (IN VIVO)
L3           917 S L2 AND REVIEW?
L4           317 S L3 AND INHIBIT?
L5           148 S L4 AND CLINICAL?
L6           127 DUPLICATE REMOVE L5 (21 DUPLICATES REMOVED)
L7             0 S L6 AND FKBP?
L8           573 S L1 AND FKBP?
L9            66 S L8 AND L2
L10            3 S L9 AND REVIEW?
L11            1 DUPLICATE REMOVE L10 (2 DUPLICATES REMOVED)

=>
```

```
d his

     (FILE 'HOME' ENTERED AT 10:43:35 ON 07 APR 2005)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
     10:43:50 ON 07 APR 2005
L1        280259 S (PROTEIN BINDING)
L2         28145 S L1 AND (IN VIVO)
L3           917 S L2 AND REVIEW?
L4           317 S L3 AND INHIBIT?
L5           148 S L4 AND CLINICAL?
L6           127 DUPLICATE REMOVE L5 (21 DUPLICATES REMOVED)
L7             0 S L6 AND FKBP?
L8           573 S L1 AND FKBP?
L9            66 S L8 AND L2
L10            3 S L9 AND REVIEW?
L11            1 DUPLICATE REMOVE L10 (2 DUPLICATES REMOVED)

=>
```

ANSWER 15 OF 127 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2004031151 EMBASE

TI Adaptor protein interactions: Modulators of amyloid precursor protein metabolism and Alzheimer's disease risk?.

AU King G.D.; Turner R.S.

CS R.S. Turner, Geriat. Res., Educ., and Clin. Ctr., Veterans Affairs Healthcare System, 2215 Fuller Road, Ann Arbor, MI 48105, United States. raymondt@umich.edu

SO Experimental Neurology, (2004) Vol. 185, No. 2, pp. 208-219.
Refs: 154
ISSN: 0014-4886 CODEN: EXNEAC

CY United States

DT Journal; General Review

FS 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
037 Drug Literature Index
038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20040212
Last Updated on STN: 20040212

AB The cytoplasmic C-terminus of APP plays critical roles in its cellular trafficking and delivery to proteases. Adaptor proteins with phosphotyrosine-binding (PTB) domains, including those in the X11, Fe65, and c-Jun N-terminal kinase (JNK)-interacting protein (JIP) families, bind specifically to the absolutely conserved -YENPTY- motif in the APP C-terminus to regulate its trafficking and processing. Compounds that modulate APP-adaptor protein interactions may **inhibit** Aβ generation by specifically targeting the substrate (APP) instead of the enzyme (β- or γ-secretase). Genetic polymorphisms in (or near) adaptor proteins may influence risk of sporadic AD by interacting with APP **in vivo** to modulate its trafficking and processing to Aβ.

CT Medical Descriptors:
*Alzheimer disease: ET, etiology
protein protein interaction
protein metabolism
risk factor
protein expression
amino acid sequence
protein synthesis
protein function
enzyme inhibition
carboxy terminal sequence
protein degradation
protein secretion
protein motif
molecular cloning
protein transport
protein binding
protein domain
sequence homology
protein family
amino terminal sequence
two hybrid system
crystal structure
protein localization
neuropathology
DNA polymorphism
side effect: SI, side effect
meningoencephalitis: SI, side effect
human

ANSWER 15 OF 127 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2004031151 EMBASE

TI Adaptor protein interactions: Modulators of amyloid precursor protein metabolism and Alzheimer's disease risk?.

AU King G.D.; Turner R.S.

CS R.S. Turner, Geriat. Res., Educ., and Clin. Ctr., Veterans Affairs Healthcare System, 2215 Fuller Road, Ann Arbor, MI 48105, United States. raymondt@umich.edu

SO Experimental Neurology, (2004) Vol. 185, No. 2, pp. 208-219.
Refs: 154
ISSN: 0014-4886 CODEN: EXNEAC

CY United States

DT Journal; General Review

FS 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
037 Drug Literature Index
038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20040212
Last Updated on STN: 20040212

AB The cytoplasmic C-terminus of APP plays critical roles in its cellular trafficking and delivery to proteases. Adaptor proteins with phosphotyrosine-binding (PTB) domains, including those in the X11, Fe65, and c-Jun N-terminal kinase (JNK)-interacting protein (JIP) families, bind specifically to the absolutely conserved -YENPTY- motif in the APP C-terminus to regulate its trafficking and processing. Compounds that modulate APP-adaptor protein interactions may **inhibit** Aβ generation by specifically targeting the substrate (APP) instead of the enzyme (β- or γ-secretase). Genetic polymorphisms in (or near) adaptor proteins may influence risk of sporadic AD by interacting with APP **in vivo** to modulate its trafficking and processing to Aβ.

CT Medical Descriptors:
*Alzheimer disease: ET, etiology
protein protein interaction
protein metabolism
risk factor
protein expression
amino acid sequence
protein synthesis
protein function
enzyme inhibition
carboxy terminal sequence
protein degradation
protein secretion
protein motif
molecular cloning
protein transport
protein binding
protein domain
sequence homology
protein family
amino terminal sequence
two hybrid system
crystal structure
protein localization
neuropathology
DNA polymorphism
side effect: SI, side effect
meningoencephalitis: SI, side effect
human

ANSWER 15 OF 127 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2004031151 EMBASE

TI Adaptor protein interactions: Modulators of amyloid precursor protein metabolism and Alzheimer's disease risk?.

AU King G.D.; Turner R.S.

CS R.S. Turner, Geriat. Res., Educ., and Clin. Ctr., Veterans Affairs Healthcare System, 2215 Fuller Road, Ann Arbor, MI 48105, United States. raymondt@umich.edu

SO Experimental Neurology, (2004) Vol. 185, No. 2, pp. 208-219.
Refs: 154
ISSN: 0014-4886 CODEN: EXNEAC

CY United States

DT Journal; General Review

FS 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
037 Drug Literature Index
038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20040212
Last Updated on STN: 20040212

AB The cytoplasmic C-terminus of APP plays critical roles in its cellular trafficking and delivery to proteases. Adaptor proteins with phosphotyrosine-binding (PTB) domains, including those in the X11, Fe65, and c-Jun N-terminal kinase (JNK)-interacting protein (JIP) families, bind specifically to the absolutely conserved -YENPTY- motif in the APP C-terminus to regulate its trafficking and processing. Compounds that modulate APP-adaptor protein interactions may **inhibit** Aβ generation by specifically targeting the substrate (APP) instead of the enzyme (β- or γ-secretase). Genetic polymorphisms in (or near) adaptor proteins may influence risk of sporadic AD by interacting with APP **in vivo** to modulate its trafficking and processing to Aβ.

CT Medical Descriptors:
*Alzheimer disease: ET, etiology
protein protein interaction
protein metabolism
risk factor
protein expression
amino acid sequence
protein synthesis
protein function
enzyme inhibition
carboxy terminal sequence
protein degradation
protein secretion
protein motif
molecular cloning
protein transport
protein binding
protein domain
sequence homology
protein family
amino terminal sequence
two hybrid system
crystal structure
protein localization
neuropathology
DNA polymorphism
side effect: SI, side effect
meningoencephalitis: SI, side effect
human

nonhuman
clinical trial
review
priority journal
Drug Descriptors:
*adaptor protein: EC, endogenous compound
*amyloid precursor protein: EC, endogenous compound
amyloid beta protein: AE, adverse drug reaction
amyloid beta protein: CT, clinical trial
alpha secretase: EC, endogenous compound
gamma secretase: EC, endogenous compound
beta secretase: EC, endogenous compound
phosphotyrosine: EC, endogenous compound
adaptor protein x11: EC, endogenous compound
adaptor protein Fe65: EC, endogenous compound
stress activated protein kinase: EC, endogenous compound
proteinase inhibitor: AE, adverse drug reaction
tsukubaenolide: PD, pharmacology
rapamycin: PD, pharmacology
fusicoccin: PD, pharmacology
protein inhibitor: CT, clinical trial
protein inhibitor: CM, drug comparison
protein inhibitor: PD, pharmacology
cyclosporin: CM, drug comparison
unclassified drug
RN (amyloid beta protein) 109770-29-8; (phosphotyrosine) 21820-51-9; (stress activated protein kinase) 155215-87-5; (proteinase **inhibitor**) 37205-61-1; (tsukubaenolide) 104987-11-3; (rapamycin) 53123-88-9; (fusicoccin) 20108-30-9; (cyclosporin) 79217-60-0
CN Fk506

nonhuman
clinical trial
review
priority journal
Drug Descriptors:
*adaptor protein: EC, endogenous compound
*amyloid precursor protein: EC, endogenous compound
amyloid beta protein: AE, adverse drug reaction
amyloid beta protein: CT, clinical trial
alpha secretase: EC, endogenous compound
gamma secretase: EC, endogenous compound
beta secretase: EC, endogenous compound
phosphotyrosine: EC, endogenous compound
adaptor protein x11: EC, endogenous compound
adaptor protein Fe65: EC, endogenous compound
stress activated protein kinase: EC, endogenous compound
proteinase inhibitor: AE, adverse drug reaction
tsukubaenolide: PD, pharmacology
rapamycin: PD, pharmacology
fusicoccin: PD, pharmacology
protein inhibitor: CT, clinical trial
protein inhibitor: CM, drug comparison
protein inhibitor: PD, pharmacology
cyclosporin: CM, drug comparison
unclassified drug
RN (amyloid beta protein) 109770-29-8; (phosphotyrosine) 21820-51-9; (stress activated protein kinase) 155215-87-5; (proteinase **inhibitor**) 37205-61-1; (tsukubaenolide) 104987-11-3; (rapamycin) 53123-88-9; (fusicoccin) 20108-30-9; (cyclosporin) 79217-60-0
CN Fk506

nonhuman
clinical trial
review
priority journal
Drug Descriptors:
*adaptor protein: EC, endogenous compound
*amyloid precursor protein: EC, endogenous compound
amyloid beta protein: AE, adverse drug reaction
amyloid beta protein: CT, clinical trial
alpha secretase: EC, endogenous compound
gamma secretase: EC, endogenous compound
beta secretase: EC, endogenous compound
phosphotyrosine: EC, endogenous compound
adaptor protein x11: EC, endogenous compound
adaptor protein Fe65: EC, endogenous compound
stress activated protein kinase: EC, endogenous compound
proteinase inhibitor: AE, adverse drug reaction
tsukubaenolide: PD, pharmacology
rapamycin: PD, pharmacology
fusicoccin: PD, pharmacology
protein inhibitor: CT, clinical trial
protein inhibitor: CM, drug comparison
protein inhibitor: PD, pharmacology
cyclosporin: CM, drug comparison
unclassified drug
RN (amyloid beta protein) 109770-29-8; (phosphotyrosine) 21820-51-9; (stress activated protein kinase) 155215-87-5; (proteinase **inhibitor**) 37205-61-1; (tsukubaenolide) 104987-11-3; (rapamycin) 53123-88-9; (fusicoccin) 20108-30-9; (cyclosporin) 79217-60-0
CN Fk506

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
AN 2000:807191 CAPLUS
DN 134:337145
ED Entered STN: 16 Nov 2000
TI Immunophilins: Switched on **protein binding** domains?
AU Ivery, Michael T. G.
CS Faculty of Pharmacy, University of Sydney, N.S.W. 2006, Australia
SO Medicinal Research Reviews (2000), 20(6), 452-484
CODEN: MRREDD; ISSN: 0198-6325
PB John Wiley & Sons, Inc.
DT Journal; General Review
LA English
CC 6-0 (General Biochemistry)
Section cross-reference(s): 1, 7
AB A **review** with 129 refs. Peptidylprolyl isomerases (PPIases) are a group of cytosolic enzymes first characterized by their ability to catalyze the cis-trans isomerization of cis-peptidylprolyl bonds. Subsequently, some PPIases were also identified as the initial targets of the immunosuppressant drugs-cyclosporin A (CsA), FK506, and rapamycin-have been called immunophilins. Immunophilins have been found to be both widely distributed and abundantly expressed leading to suggestions that they may play a general role in cellular biochem. However, the nature of this role has been difficult to elucidate and is still controversial in **vivo**. A number of roles for these enzymes have been identified in vitro including the ability to catalyze the refolding of partly denatured proteins and stabilize multiprotein complexes such as Ca2+ channels, inactive steroid receptor complexes, and receptor protein tyrosine kinases. Generally, these effects appear to depend on the ability of immunophilins to selectively bind to other proteins. This **review** will examine in detail exptl. and structural investigations of the mechanism of PPIase activity for both **FKBPs** and cyclophilins and suggest a mechanism for these enzymes, which depends on their ability to recognize a specific peptide conformation rather than sequence. Examination of structures of immunophilin-protein complexes will then be used to further suggest that the ability of these enzymes to recognize specific peptide conformations is central to the formation of these complexes and may constitute a general function of immunophilin enzymes. The binding of ligand to immunophilins will also be shown to stabilize specific conformations in surface loops of these proteins that are observed to play a critical role in a number of immunophilin-protein complexes suggesting that the immunophilins may constitute a class of ligand-triggered selective protein binders.
ST immunophilin **FKBP protein binding review**
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(**FKBP** (FK 506-binding protein); immunophilins: switched on **protein binding** domains)
IT Protein receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding; immunophilins: switched on **protein binding** domains)
IT Isomerization
(cis-trans; immunophilins: switched on **protein binding** domains)
IT Protein folding
(immunophilins: switched on **protein binding** domains)
IT Cyclophilins
Immunophilins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
AN 2000:807191 CAPLUS
DN 134:337145
ED Entered STN: 16 Nov 2000
TI Immunophilins: Switched on **protein binding** domains?
AU Ivery, Michael T. G.
CS Faculty of Pharmacy, University of Sydney, N.S.W. 2006, Australia
SO Medicinal Research Reviews (2000), 20(6), 452-484
CODEN: MRREDD; ISSN: 0198-6325
PB John Wiley & Sons, Inc.
DT Journal; General Review
LA English
CC 6-0 (General Biochemistry)
Section cross-reference(s): 1, 7
AB A **review** with 129 refs. Peptidylprolyl isomerases (PPIases) are a group of cytosolic enzymes first characterized by their ability to catalyze the cis-trans isomerization of cis-peptidylprolyl bonds. Subsequently, some PPIases were also identified as the initial targets of the immunosuppressant drugs-cyclosporin A (CsA), FK506, and rapamycin-have been called immunophilins. Immunophilins have been found to be both widely distributed and abundantly expressed leading to suggestions that they may play a general role in cellular biochem. However, the nature of this role has been difficult to elucidate and is still controversial in **vivo**. A number of roles for these enzymes have been identified in vitro including the ability to catalyze the refolding of partly denatured proteins and stabilize multiprotein complexes such as Ca2+ channels, inactive steroid receptor complexes, and receptor protein tyrosine kinases. Generally, these effects appear to depend on the ability of immunophilins to selectively bind to other proteins. This **review** will examine in detail exptl. and structural investigations of the mechanism of PPIase activity for both **FKBPs** and cyclophilins and suggest a mechanism for these enzymes, which depends on their ability to recognize a specific peptide conformation rather than sequence. Examination of structures of immunophilin-protein complexes will then be used to further suggest that the ability of these enzymes to recognize specific peptide conformations is central to the formation of these complexes and may constitute a general function of immunophilin enzymes. The binding of ligand to immunophilins will also be shown to stabilize specific conformations in surface loops of these proteins that are observed to play a critical role in a number of immunophilin-protein complexes suggesting that the immunophilins may constitute a class of ligand-triggered selective protein binders.
ST immunophilin **FKBP protein binding** **review**
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(**FKBP** (FK 506-binding protein); immunophilins: switched on **protein binding** domains)
IT Protein receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding; immunophilins: switched on **protein binding** domains)
IT Isomerization
(cis-trans; immunophilins: switched on **protein binding** domains)
IT Protein folding
(immunophilins: switched on **protein binding** domains)
IT Cyclophilins
Immunophilins
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

(Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
IT Conformation
(protein; immunophilins: switched on **protein binding** domains)
IT 95076-93-0, Peptidylprolyl isomerase
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
RE.CNT 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Abraham, R; Curr Opin Immun 1998, V10, P330 CAPLUS
(2) Albers, M; J Org Chem 1990, V55, P4984 CAPLUS
(3) Aldape, R; J Biol Chem 1992, V267, P16029 CAPLUS
(4) Bierer, B; Proc Natl Acad Sci USA 1990, V87, P9231 CAPLUS
(5) Bierer, B; Science 1990, V250, P556 CAPLUS
(6) Borel, J; Agents Actions 1976, V6, P468 CAPLUS
(7) Brillantes, A; Cell 1994, V77, P513 CAPLUS
(8) Brown, E; Nature 1994, V369, P756 CAPLUS
(9) Cameron, A; Cell 1995, V83, P463 CAPLUS
(10) Cameron, A; J Biol Chem 1997, V272, P27582 CAPLUS
(11) Chen, Y; EMBO J 1997, V16, P3866 CAPLUS
(12) Cheng, J; Biochemistry 1994, V33, P4093 CAPLUS
(13) Choi, J; Science 1996, V273, P239 CAPLUS
(14) Clardy, J; Proc Natl Acad Sci USA 1995, V92, P56 CAPLUS
(15) Crabtree, G; Cell 1999, V96, P611 CAPLUS
(16) Danovitch, G; Transplant Proc 1999, V31(Suppl 8), P2S
(17) Dumont, F; Life Sciences 1996, V58, P373 MEDLINE
(18) Emmel, E; Science 1989, V246, P1617 CAPLUS
(19) Etzkorn, F; Biochemistry 1994, V1994, P2380
(20) Evans, S; J Mol Graphics 1993, V11, P134 CAPLUS
(21) Faux, M; TIBS 1996, V21, P312 CAPLUS
(22) Fischer, G; Biomed Biochim Acta 1984, V43, P1101 CAPLUS
(23) Fischer, G; FEBS Lett 1989, V250, P267 CAPLUS
(24) Fischer, G; Nature 1989, V337, P476 CAPLUS
(25) Fischer, S; Biochemistry 1993, V32, P13830 CAPLUS
(26) Fischer, S; J Am Chem 1998, V120, P10660
(27) Friedman, J; Cell 1991, V66, P799 CAPLUS
(28) Fung, J; Ther Drug Mon 1992, V17, P592
(29) Futer, O; J Biol Chem 1995, V270, P18935 CAPLUS
(30) Galat, A; Eur J Biochem 1993, V276, P689
(31) Gething, M; Nature 1992, V355, P33 CAPLUS
(32) Gothel, S; Cell Mol Life Sci 1999, V55, P423 MEDLINE
(33) Goulet, M; Persp Drug Disc Des 1994, V2, P45
(34) Handschumacher, R; Science 1984, V226, P544 CAPLUS
(35) Harding, M; Nature 1989, V341, P758 CAPLUS
(36) Harrison, R; Biochemistry 1990, V29, P1684 CAPLUS
(37) Harrison, R; Biochemistry 1990, V29, P3813 CAPLUS
(38) Harrison, R; J Am Chem Soc 1990, V112, P7063 CAPLUS
(39) Ivery, J; Bioorg Med Chem 1999, V7, P1389
(40) Ivery, M; Bioorg Med Chem 1997, V5, P217 CAPLUS
(41) Jaenicke, R; Prog Biophys Mol Biol 1987, V49, P117 CAPLUS
(42) Jain, A; Clin Immunother 1996, V5, P351
(43) Kiefhaber, T; Biochemistry 1990, V29, P3061 CAPLUS
(44) Kissinger, C; Nature 1995, V378, P641 CAPLUS
(45) Klee, C; Adv Enzymol 1988, V61, P149 CAPLUS
(46) Kofron, J; Biochemistry 1991, V30, P6127 CAPLUS
(47) Kofron, J; J Am Chem Soc 1992, V114, P2670 CAPLUS
(48) Liu, J; Cell 1991, V66, P807 CAPLUS
(49) Luban, J; Cell 1993, V73, P1067 CAPLUS
(50) Marks, A; Am J Physiol 1997, V41, PH597

(Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
IT Conformation
(protein; immunophilins: switched on **protein binding** domains)
IT 95076-93-0, Peptidylprolyl isomerase
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
RE.CNT 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Abraham, R; Curr Opin Immun 1998, V10, P330 CAPLUS
(2) Albers, M; J Org Chem 1990, V55, P4984 CAPLUS
(3) Aldape, R; J Biol Chem 1992, V267, P16029 CAPLUS
(4) Bierer, B; Proc Natl Acad Sci USA 1990, V87, P9231 CAPLUS
(5) Bierer, B; Science 1990, V250, P556 CAPLUS
(6) Borel, J; Agents Actions 1976, V6, P468 CAPLUS
(7) Brillantes, A; Cell 1994, V77, P513 CAPLUS
(8) Brown, E; Nature 1994, V369, P756 CAPLUS
(9) Cameron, A; Cell 1995, V83, P463 CAPLUS
(10) Cameron, A; J Biol Chem 1997, V272, P27582 CAPLUS
(11) Chen, Y; EMBO J 1997, V16, P3866 CAPLUS
(12) Cheng, J; Biochemistry 1994, V33, P4093 CAPLUS
(13) Choi, J; Science 1996, V273, P239 CAPLUS
(14) Clardy, J; Proc Natl Acad Sci USA 1995, V92, P56 CAPLUS
(15) Crabtree, G; Cell 1999, V96, P611 CAPLUS
(16) Danovitch, G; Transplant Proc 1999, V31(Suppl 8), P2S
(17) Dumont, F; Life Sciences 1996, V58, P373 MEDLINE
(18) Emmel, E; Science 1989, V246, P1617 CAPLUS
(19) Etzkorn, F; Biochemistry 1994, V1994, P2380
(20) Evans, S; J Mol Graphics 1993, V11, P134 CAPLUS
(21) Faux, M; TIBS 1996, V21, P312 CAPLUS
(22) Fischer, G; Biomed Biochim Acta 1984, V43, P1101 CAPLUS
(23) Fischer, G; FEBS Lett 1989, V250, P267 CAPLUS
(24) Fischer, G; Nature 1989, V337, P476 CAPLUS
(25) Fischer, S; Biochemistry 1993, V32, P13830 CAPLUS
(26) Fischer, S; J Am Chem 1998, V120, P10660
(27) Friedman, J; Cell 1991, V66, P799 CAPLUS
(28) Fung, J; Ther Drug Mon 1992, V17, P592
(29) Futer, O; J Biol Chem 1995, V270, P18935 CAPLUS
(30) Galat, A; Eur J Biochem 1993, V276, P689
(31) Gething, M; Nature 1992, V355, P33 CAPLUS
(32) Gothel, S; Cell Mol Life Sci 1999, V55, P423 MEDLINE
(33) Goulet, M; Persp Drug Disc Des 1994, V2, P45
(34) Handschumacher, R; Science 1984, V226, P544 CAPLUS
(35) Harding, M; Nature 1989, V341, P758 CAPLUS
(36) Harrison, R; Biochemistry 1990, V29, P1684 CAPLUS
(37) Harrison, R; Biochemistry 1990, V29, P3813 CAPLUS
(38) Harrison, R; J Am Chem Soc 1990, V112, P7063 CAPLUS
(39) Ivery, J; Bioorg Med Chem 1999, V7, P1389
(40) Ivery, M; Bioorg Med Chem 1997, V5, P217 CAPLUS
(41) Jaenicke, R; Prog Biophys Mol Biol 1987, V49, P117 CAPLUS
(42) Jain, A; Clin Immunother 1996, V5, P351
(43) Kiefhaber, T; Biochemistry 1990, V29, P3061 CAPLUS
(44) Kissinger, C; Nature 1995, V378, P641 CAPLUS
(45) Klee, C; Adv Enzymol 1988, V61, P149 CAPLUS
(46) Kofron, J; Biochemistry 1991, V30, P6127 CAPLUS
(47) Kofron, J; J Am Chem Soc 1992, V114, P2670 CAPLUS
(48) Liu, J; Cell 1991, V66, P807 CAPLUS
(49) Luban, J; Cell 1993, V73, P1067 CAPLUS
(50) Marks, A; Am J Physiol 1997, V41, PH597

(Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
IT Conformation
(protein; immunophilins: switched on **protein binding** domains)
IT 95076-93-0, Peptidylprolyl isomerase
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(immunophilins: switched on **protein binding** domains)
RE.CNT 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Abraham, R; Curr Opin Immun 1998, V10, P330 CAPLUS
(2) Albers, M; J Org Chem 1990, V55, P4984 CAPLUS
(3) Aldape, R; J Biol Chem 1992, V267, P16029 CAPLUS
(4) Bierer, B; Proc Natl Acad Sci USA 1990, V87, P9231 CAPLUS
(5) Bierer, B; Science 1990, V250, P556 CAPLUS
(6) Borel, J; Agents Actions 1976, V6, P468 CAPLUS
(7) Brillantes, A; Cell 1994, V77, P513 CAPLUS
(8) Brown, E; Nature 1994, V369, P756 CAPLUS
(9) Cameron, A; Cell 1995, V83, P463 CAPLUS
(10) Cameron, A; J Biol Chem 1997, V272, P27582 CAPLUS
(11) Chen, Y; EMBO J 1997, V16, P3866 CAPLUS
(12) Cheng, J; Biochemistry 1994, V33, P4093 CAPLUS
(13) Choi, J; Science 1996, V273, P239 CAPLUS
(14) Clardy, J; Proc Natl Acad Sci USA 1995, V92, P56 CAPLUS
(15) Crabtree, G; Cell 1999, V96, P611 CAPLUS
(16) Danovitch, G; Transplant Proc 1999, V31(Suppl 8), P2S
(17) Dumont, F; Life Sciences 1996, V58, P373 MEDLINE
(18) Emmel, E; Science 1989, V246, P1617 CAPLUS
(19) Etzkorn, F; Biochemistry 1994, V1994, P2380
(20) Evans, S; J Mol Graphics 1993, V11, P134 CAPLUS
(21) Faux, M; TIBS 1996, V21, P312 CAPLUS
(22) Fischer, G; Biomed Biochim Acta 1984, V43, P1101 CAPLUS
(23) Fischer, G; FEBS Lett 1989, V250, P267 CAPLUS
(24) Fischer, G; Nature 1989, V337, P476 CAPLUS
(25) Fischer, S; Biochemistry 1993, V32, P13830 CAPLUS
(26) Fischer, S; J Am Chem 1998, V120, P10660
(27) Friedman, J; Cell 1991, V66, P799 CAPLUS
(28) Fung, J; Ther Drug Mon 1992, V17, P592
(29) Futer, O; J Biol Chem 1995, V270, P18935 CAPLUS
(30) Galat, A; Eur J Biochem 1993, V276, P689
(31) Gething, M; Nature 1992, V355, P33 CAPLUS
(32) Gothel, S; Cell Mol Life Sci 1999, V55, P423 MEDLINE
(33) Goulet, M; Persp Drug Disc Des 1994, V2, P45
(34) Handschumacher, R; Science 1984, V226, P544 CAPLUS
(35) Harding, M; Nature 1989, V341, P758 CAPLUS
(36) Harrison, R; Biochemistry 1990, V29, P1684 CAPLUS
(37) Harrison, R; Biochemistry 1990, V29, P3813 CAPLUS
(38) Harrison, R; J Am Chem Soc 1990, V112, P7063 CAPLUS
(39) Ivery, J; Bioorg Med Chem 1999, V7, P1389
(40) Ivery, M; Bioorg Med Chem 1997, V5, P217 CAPLUS
(41) Jaenicke, R; Prog Biophys Mol Biol 1987, V49, P117 CAPLUS
(42) Jain, A; Clin Immunother 1996, V5, P351
(43) Kiefhaber, T; Biochemistry 1990, V29, P3061 CAPLUS
(44) Kissinger, C; Nature 1995, V378, P641 CAPLUS
(45) Klee, C; Adv Enzymol 1988, V61, P149 CAPLUS
(46) Kofron, J; Biochemistry 1991, V30, P6127 CAPLUS
(47) Kofron, J; J Am Chem Soc 1992, V114, P2670 CAPLUS
(48) Liu, J; Cell 1991, V66, P807 CAPLUS
(49) Luban, J; Cell 1993, V73, P1067 CAPLUS
(50) Marks, A; Am J Physiol 1997, V41, PH597

(51) Martel, R; Can J Physiol Pharmacol 1977, V55, P48 CAPLUS
(52) Marx, S; Science 1998, V281, P818 CAPLUS
(53) Massague, J; Annu Rev Cell Biol 1990, V6, P597 CAPLUS
(54) Massague, J; Cell 1996, V85, P947 CAPLUS
(55) Muller, G; Prot Struc Funct Genet 1993, V15, P235 MEDLINE
(56) Papageorgiou, C; Bioorg Med Chem Lett 1994, V4, P267 CAPLUS
(57) Pawson, T; Nature 1995, V373, P573 CAPLUS
(58) Petcher, T; Helv Chim Acta 1976, V59, P1480 CAPLUS
(59) Petros, A; J Am Chem Soc 1993, V115, P9920 CAPLUS
(60) Petros, A; J Med Chem 1991, V34, P2925 CAPLUS
(61) Pflugl, G; Nature 1993, V361, P91 MEDLINE
(62) Price, E; Proc Natl Acad Sci USA 1991, V88, P1903 CAPLUS
(63) Qi, Y; J Biol Chem 1998, V273, P34813 CAPLUS
(64) Roberts, A; Peptide growth factors and their receptors 1990, P419
(65) Rosen, M; Angew Chem Ind Ed Engl 1992, V31, P384
(66) Rosen, M; Science 1990, V248, P863 CAPLUS
(67) Rouviere, N; Biochemistry 1997, V36, P7339 CAPLUS
(68) Ruegger, A; Helv Chim Acta 1976, V59, P1075 CAPLUS
(69) Sabatini, D; Cell 1994, V78, P35 CAPLUS
(70) Schreiber, S; Acc Chem Res 1993, V26, P412 CAPLUS
(71) Schreiber, S; Immunol Today 1992, V13, P136 CAPLUS
(72) Schreiber, S; Science 1991, V251, P283 CAPLUS
(73) Sehgal, S; J Antibiot 1975, V28, P721
(74) Sewell, T; J Biol Chem 1993, V269, P21094
(75) Shou, W; Nature 1998, V391, P489 CAPLUS
(76) Stein, R; Adv Prot Chem 1991, V44, P1
(77) Stites, W; Chem Rev 1997, V97, P1233 CAPLUS
(78) Taga, T; Acta Cryst 1987, VC43, P751 CAPLUS
(79) Tai, P; Science 1992, V256, P1315 CAPLUS
(80) Thomson, A; Immunol Rev 1993, V136, P71 CAPLUS
(81) Wang, T; Science 1994, V265, P674 CAPLUS
(82) Wenger, R; Angew Chem Int Ed Engl 1985, V24, P77
(83) Wenger, R; FEBS Lett 1994, V340, P255 CAPLUS
(84) Yoo, S; J Mol Biol 1997, V269, P780 CAPLUS
(85) Zydowsky, L; Prot Science 1992, V1, P1092 CAPLUS

(51) Martel, R; Can J Physiol Pharmacol 1977, V55, P48 CAPLUS
(52) Marx, S; Science 1998, V281, P818 CAPLUS
(53) Massague, J; Annu Rev Cell Biol 1990, V6, P597 CAPLUS
(54) Massague, J; Cell 1996, V85, P947 CAPLUS
(55) Muller, G; Prot Struc Funct Genet 1993, V15, P235 MEDLINE
(56) Papageorgiou, C; Bioorg Med Chem Lett 1994, V4, P267 CAPLUS
(57) Pawson, T; Nature 1995, V373, P573 CAPLUS
(58) Petcher, T; Helv Chim Acta 1976, V59, P1480 CAPLUS
(59) Petros, A; J Am Chem Soc 1993, V115, P9920 CAPLUS
(60) Petros, A; J Med Chem 1991, V34, P2925 CAPLUS
(61) Pflugl, G; Nature 1993, V361, P91 MEDLINE
(62) Price, E; Proc Natl Acad Sci USA 1991, V88, P1903 CAPLUS
(63) Qi, Y; J Biol Chem 1998, V273, P34813 CAPLUS
(64) Roberts, A; Peptide growth factors and their receptors 1990, P419
(65) Rosen, M; Angew Chem Ind Ed Engl 1992, V31, P384
(66) Rosen, M; Science 1990, V248, P863 CAPLUS
(67) Rouviere, N; Biochemistry 1997, V36, P7339 CAPLUS
(68) Ruegger, A; Helv Chim Acta 1976, V59, P1075 CAPLUS
(69) Sabatini, D; Cell 1994, V78, P35 CAPLUS
(70) Schreiber, S; Acc Chem Res 1993, V26, P412 CAPLUS
(71) Schreiber, S; Immunol Today 1992, V13, P136 CAPLUS
(72) Schreiber, S; Science 1991, V251, P283 CAPLUS
(73) Sehgal, S; J Antibiot 1975, V28, P721
(74) Sewell, T; J Biol Chem 1993, V269, P21094
(75) Shou, W; Nature 1998, V391, P489 CAPLUS
(76) Stein, R; Adv Prot Chem 1991, V44, P1
(77) Stites, W; Chem Rev 1997, V97, P1233 CAPLUS
(78) Taga, T; Acta Cryst 1987, VC43, P751 CAPLUS
(79) Tai, P; Science 1992, V256, P1315 CAPLUS
(80) Thomson, A; Immunol Rev 1993, V136, P71 CAPLUS
(81) Wang, T; Science 1994, V265, P674 CAPLUS
(82) Wenger, R; Angew Chem Int Ed Engl 1985, V24, P77
(83) Wenger, R; FEBS Lett 1994, V340, P255 CAPLUS
(84) Yoo, S; J Mol Biol 1997, V269, P780 CAPLUS
(85) Zydowsky, L; Prot Science 1992, V1, P1092 CAPLUS

(51) Martel, R; Can J Physiol Pharmacol 1977, V55, P48 CAPLUS
(52) Marx, S; Science 1998, V281, P818 CAPLUS
(53) Massague, J; Annu Rev Cell Biol 1990, V6, P597 CAPLUS
(54) Massague, J; Cell 1996, V85, P947 CAPLUS
(55) Muller, G; Prot Struc Funct Genet 1993, V15, P235 MEDLINE
(56) Papageorgiou, C; Bioorg Med Chem Lett 1994, V4, P267 CAPLUS
(57) Pawson, T; Nature 1995, V373, P573 CAPLUS
(58) Petcher, T; Helv Chim Acta 1976, V59, P1480 CAPLUS
(59) Petros, A; J Am Chem Soc 1993, V115, P9920 CAPLUS
(60) Petros, A; J Med Chem 1991, V34, P2925 CAPLUS
(61) Pflugl, G; Nature 1993, V361, P91 MEDLINE
(62) Price, E; Proc Natl Acad Sci USA 1991, V88, P1903 CAPLUS
(63) Qi, Y; J Biol Chem 1998, V273, P34813 CAPLUS
(64) Roberts, A; Peptide growth factors and their receptors 1990, P419
(65) Rosen, M; Angew Chem Ind Ed Engl 1992, V31, P384
(66) Rosen, M; Science 1990, V248, P863 CAPLUS
(67) Rouviere, N; Biochemistry 1997, V36, P7339 CAPLUS
(68) Ruegger, A; Helv Chim Acta 1976, V59, P1075 CAPLUS
(69) Sabatini, D; Cell 1994, V78, P35 CAPLUS
(70) Schreiber, S; Acc Chem Res 1993, V26, P412 CAPLUS
(71) Schreiber, S; Immunol Today 1992, V13, P136 CAPLUS
(72) Schreiber, S; Science 1991, V251, P283 CAPLUS
(73) Sehgal, S; J Antibiot 1975, V28, P721
(74) Sewell, T; J Biol Chem 1993, V269, P21094
(75) Shou, W; Nature 1998, V391, P489 CAPLUS
(76) Stein, R; Adv Prot Chem 1991, V44, P1
(77) Stites, W; Chem Rev 1997, V97, P1233 CAPLUS
(78) Taga, T; Acta Cryst 1987, VC43, P751 CAPLUS
(79) Tai, P; Science 1992, V256, P1315 CAPLUS
(80) Thomson, A; Immunol Rev 1993, V136, P71 CAPLUS
(81) Wang, T; Science 1994, V265, P674 CAPLUS
(82) Wenger, R; Angew Chem Int Ed Engl 1985, V24, P77
(83) Wenger, R; FEBS Lett 1994, V340, P255 CAPLUS
(84) Yoo, S; J Mol Biol 1997, V269, P780 CAPLUS
(85) Zydowsky, L; Prot Science 1992, V1, P1092 CAPLUS